(No Model.)

ARTEMUS WELSH & ALBERTUS WELSH.

LOCOMOTIVE ASH PAN.

No. 490,332. Patented Jan. 24, 1893.

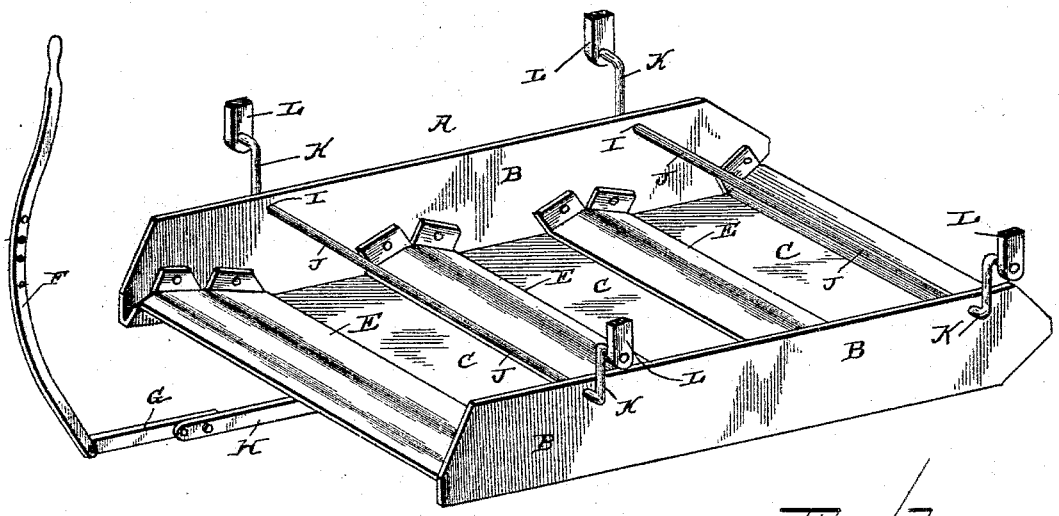

Fig. 1.

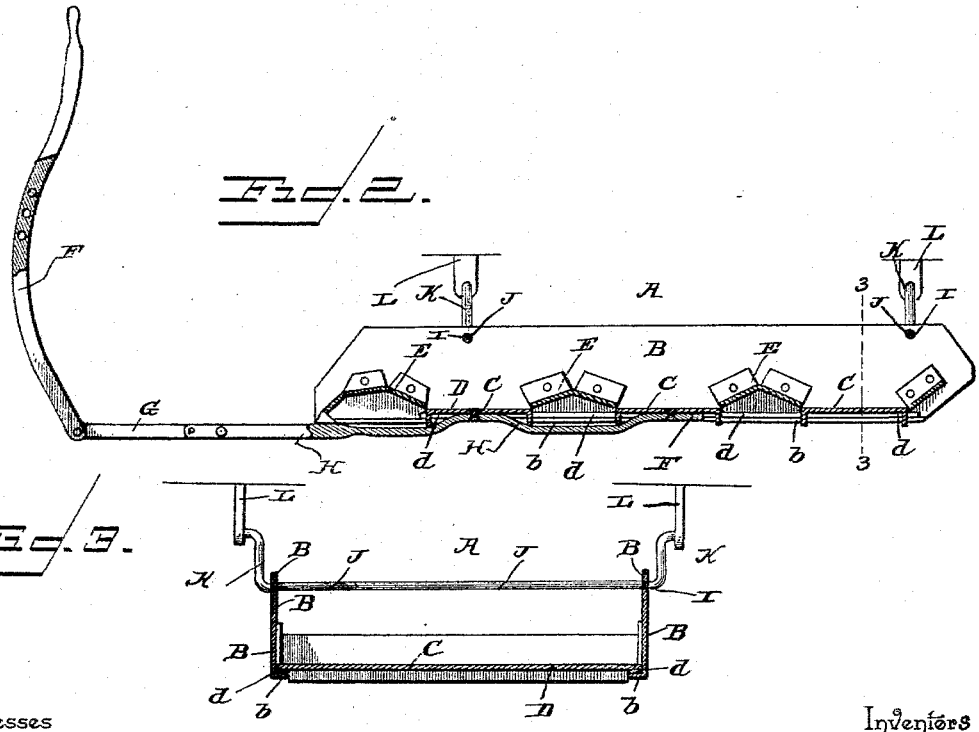

Fig. 2.

Fig. 3.

Witnesses
E. K. Stewart.
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UNITED STATES PATENT OFFICE.

ARTEMUS WELSH AND ALBERTUS WELSH, OF LAWRENCE, KANSAS, ASSIGNORS OF ONE-HALF TO J. M. JONES AND J. R. GREENLESS, OF SAME PLACE.

LOCOMOTIVE ASH-PAN.

SPECIFICATION forming part of Letters Patent No. 490,332, dated January 24, 1893.

Application filed October 18, 1892. Serial No. 449,202. (No model.)

To all whom it may concern:

Be it known that we, ARTEMUS WELSH and ALBERTUS WELSH, citizens of the United States, residing at Lawrence, in the county of Douglas and State of Kansas, have invented a new and useful Locomotive Ash-Pan, of which the following is a specification.

This invention relates to locomotive ash pans; and it has for its object to provide an improved device of this character adapted to be used directly under the fire grates of the boiler, so that all ashes, clinkers &c. can be dropped at will by the engineer.

To this end, the invention contemplates certain improvements in ash pans of this character whereby the same are rendered more efficient in operation and secure the results desired in a positive manner.

With these and many other objects in view, which will readily appear as the nature of the invention is better understood the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a locomotive ash pan constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 2.

Referring to the accompanying drawings:—A represents the swinging ash pan, having the opposite parallel sides B, provided at their lower ends with the inturned ledges or flanges *b*, which support the opposite edges of the sliding bottom C. The sliding bottom C, comprises the spaced slats D, connected at their ends to the opposite side strips *d*, resting upon the flanges of the sides, so that the bottom can be moved back and forth under the upper stationary slats E, directly thereover. The said stationary slats E, are triangular in cross-section and are fixedly secured at their ends to the opposite sides B, directly over the slats of the sliding bottom, so as to leave intermediate dumping spaces, which are covered and uncovered by the sliding bottom as the same is moved by the bottom actuating lever F. The lever F, is under the control of the engineer in the cab of the engine and is connected at its lower end by the link G, to the operating bar H, secured to the under side of the sliding bottom, so that the same can be readily controlled. The opposite sides B, of the pan are perforated as at I, to receive the horizontal parallel rock shafts J. The horizontal rock shafts J, have the opposite crank ends K, journaled in suitable depending supports or bearings L, arranged under the grates of the boilers, so as to provide means for swinging the entire pan by means of the bottom controlling lever F at the same time that the sliding bottom uncovers the openings or spaces between the stationary slats. The swinging support for the ash pan allows the same to be swung back and forth, in order to free the pan entirely of clinkers and cinders, which frequently lie between the stationary slats. It will be obvious that, simultaneous with the sliding of the bottom C, by means of the lever F, the entire pan will be swung, and that by a slight vibration of the lever, the contents of the pan can be readily shaken out.

The advantages and usefulness of this construction will readily suggest themselves to those skilled in the art.

Having thus described our invention, what we desire to secure by Letters Patent is:—

The combination in a locomotive ash pan having stationary slats, a sliding dumping bottom moving under the slats, and perforations in the opposite sides thereof, of opposite parallel rock shafts having crank ends journaled in depending supports, said shafts extending transversely across and loosely engaging the perforations in the sides of the pan, and a single operating lever connected with the sliding bottom to control the same and also to provide means for simultaneously swinging the pan, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

ARTEMUS WELSH.
ALBERTUS WELSH.

Witnesses:
GEO. B. EDGAR,
ED. HISLOP.